Application/Control Number: 10/786,314 Page 2

Art Unit: 2139

DETAILED ACTION

The amendment of 29 February 2008 has been noted and made of record.

Claims 1-37 have been presented for examination.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 06 March 2008 and 03 April 2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

Response to Arguments

- 4. Applicant's arguments, see page 10, and amendments filed 29 February 2008, with respect to the 35 U.S.C. 101 rejection of claims 1-10, 12-21, 23, 26, 30, 34, 35, and 37 have been fully considered and are persuasive. The 35 U.S.C. 101 rejection of claims 1-10, 12-21, 23, 26, 30, 34, 35, and 37 has been withdrawn.
- 5. Applicant's arguments, see pages 11 and 12, filed 29 February 2008, with respect to the prior art rejection of independent claims 1 and 31-33 have been fully considered and are persuasive. The prior art rejection of claims 1 and 31-33 has been withdrawn.
- 6. Applicant's arguments, see pages 12 and 13, filed 29 February 2008, with respect to the prior art rejection of independent claim 34 have been fully considered and are persuasive. The prior art rejection of claim 34 has been withdrawn.
- 6. Applicant's arguments, see pages 13 and 14, filed 29 February 2008, with respect to the prior art rejection of independent claim 35 have been fully considered and are persuasive. The prior art rejection of claim 35 has been withdrawn.

Application/Control Number: 10/786,314 Page 3

Art Unit: 2139

7. Applicant's arguments, see pages 14 and 15, filed 29 February 2008, with respect to the prior art rejection of independent claim 36 have been fully considered and are persuasive. The prior art rejection of claim 36 has been withdrawn.

8. Applicant's arguments, see pages 16 and 17, filed 29 February 2008, with respect to the prior art rejection of independent claim 37 have been fully considered and are persuasive. The prior art rejection of claim 37 has been withdrawn.

Allowable Subject Matter

- Claims 1-37 are allowed.
- 10. The following is an examiner's statement of reasons for allowance:

As noted above, the Examiner agrees with the Applicant's arguments regarding the independent claims. Specifically, the Examiner cannot find reserving a rate at which cryptographic material is provided (see similar but not necessarily identical claim language), wherein the Examiner interprets rate as bits per second as defined by the first paragraph found on page 16 and not an error rate. Since no teach can be found of reserving a rate at which cryptographic material, nor anything that would render the claims obvious, claims 1-37 are novel and not obvious.

11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/786,314 Page 4

Art Unit: 2139

Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. The following patents are cited to further show the state of the art with respect to quantum key distribution, such as:

United States Patent No. 7,068,790 B1 to Elliott, which is cited to show establishing a path in quantum key distribution, but is silent on transmission rates.

- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian LaForgia whose telephone number is (571)272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.
- 15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christian LaForgia/

Application/Control Number: 10/786,314

Page 5

Art Unit: 2139

Primary Examiner, Art Unit 2139

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